November 4, 2022

To: Rick Canizales  
Department of Transportation, Prince William County, Virginia

From: Erik Spencer  
Virginia Department of Transportation – Prince William Land Use Section  
703-259-2948 erik.spencer@VDOT.Virginia.gov

Subject: Pathway to 2040:  
CPA 2018-00006 – Mobility Chapter Update  
CPA 2018-00007 – Land Use Chapter Update  
CPA 2022-00001 – Housing Chapter Update  
CPA 2022-00002 – Sanitary Sewer Chapter Update  
CPA 2023-00001 – Electrical Utility Services Plan Update

In accordance with the Virginia Traffic Impact Analysis Regulations, 24VAC30-155, five (5) comprehensive plan amendments identified above were submitted to the Virginia Department of Transportation (VDOT) for review on September 09, 2022.

VDOT has reviewed these proposed comprehensive plan amendments and prepared a report with our written comments. The report presents a summary of our key findings as well as comments on the future transportation improvements that will be needed to support the current and planned development in the County. Our report and comments are attached to assist the Planning Director, the Planning Commission and the Board of Supervisors in their decision making process regarding the Pathway to 2040 comprehensive plan amendments.

Please have VDOT’s comments included in the locality’s official public records. VDOT will make these documents available to the general public through various means, such as posting them on our website.
Sincerely,

Erik Spencer, P.E., VDOT, Area Land Use Engineer – Prince William County

cc: John Lynch, VDOT
    Maria Sinner, VDOT
    Richard Burke, VDOT
    Elizabeth D. Scullin, PWC DOT
Executive Summary

Prince William County is updating its Comprehensive Plan (Pathway to 2040) which guides the future growth, redevelopment and preservation of the county as well as its investments in future public infrastructure. The chapters that are being updated include Land Use, Mobility (previously Transportation), Housing, Sewer and Electrical. The drafts of these chapters are posted on the Pathway to 2040 website: www.pwcgov.org/Pathwayto2040

The Land Use Chapter provides a development vision showing how the county will utilize its land resources. In addition, this chapter provides a plan to accommodate future development in an efficient and sustainable way that is compatible with the character of various communities while protecting the valuable and sensitive natural resources throughout the county and contributing to the county’s climate and resiliency goals.

The Housing Chapter contains all the policies and action strategies to achieve the county’s vision of being a community of choice for all residents. This chapter addresses affordability concerns and ensures that the implicit connections with mobility, environment, health and equity are addressed to support the building of healthy equitable communities.

The Mobility Chapter provides a plan for an accessible, safe, comprehensive, multimodal transportation network that allows for the safe and efficient movement of goods and people throughout the County and into surrounding jurisdictions.

The Sanitary Sewer Chapter is to facilitate the provision of economically feasible and environmentally sensitive systems of wastewater and sewage collection, conveyance, and treatment to serve residents for Prince William County.

The Electrical Utility Services Plan Chapter policies and action strategies set forth in this plan provide guidance on siting and design issues and are to be used in evaluating land use applications.

The Five (5) proposed CPAs have been provided to the following agencies for review and comment:

- VDOT - Transportation Planning
- VDOT - Traffic Operations
- VDOT - Traffic Engineering
- VDOT – Preliminary Engineering and Land Use
- VDOT - Land Development
- Virginia Department of Rail and Public Transportation (DRPT)
- Northern Virginia Transportation Authority (NVTA)
**VDOT – Transportation Planning comments:**

- Please include a thoroughfare map with the Comprehensive Plan.
- According to Chapter 729 requirements the comp plan is required to identify corridors of Statewide Significance.
- Please note the following:
  - For Chapter 536 reporting sections of the following roads I-66, I-95, Centreville Road, Balls Ford Road, Sudley Road, Lomond Dr, Nokesville Road, Yates Ford Road, Dale Blvd, US-1, Gordon Blvd are identified as roadways in the comprehensive plan for which the volume is expected to exceed capacity by 2040.
  - As per Pathway to 2040 Mobility Chapter the acceptable standard for Level Of Service is reduced to a E from D.
  - The following corridors are proposed to have a reduction in the number of lanes in the current comprehensive plan as compared to the previous plan: Lucasville Road from Manassas CL to Bristow Rd from 4 to 2 lanes, Route 28 Bypass from Sudley Road to Ffx County Line from 6 lanes to 4 lanes, Summit School Road from Minnieville Road to Telegraph Road from 6 lanes to 4 lanes, Telegraph Road from Minnieville Road to Summit School Road from 4 lanes to 2 lanes, John Marshall Hwy from Catharpin to Route 29 reduce by 2 lanes and Vint Hill Road from Fauquier CL to Rollins Ford Road reduce by 2 lanes.
  - The following roadways are recommended to be removed from the proposed comp plan: Carver Road from Old Carolina to Route 29, Thoroughfare Road from Route 15 to Mc Graws Coner, Mc Graws Corner Dr from Somerset Crossing to Thoroughfare Road, Station Street from University to Balls Ford Road, Rollins Ford Road from University to Wellington and Harry Parrish Blvd from Clover Hill to South.
- **Prince William County Travel Model Update 2022**
  - Page 26, what does link distance factoring (0.5 in the previous model and 0.75 in the new one) used for. Is it used for travel time calculations (like in BPR functions)? If so, does it not mean that the FFS lookup table should be adjusted instead (by a factor of 1/0.75 or 4/3)?
  - Pages 45-46, there are 11 criteria in Table 4.1 five of which not met. This is not consistent with the statement on page 45.
  - Page 47, what is the quantity (percentage) shown in Table 4.2. Please define. If this is MAPE later defined under Table 4.3, please re-arrange. Also, present the model performance in comparison with these targets. Again, if this is what is shown in Table 4.3, please clarify the text.
  - If individual link daily volume percentage errors are calculated vs some targets (e.g. those shown in Table 7-8 of FHWA's 1997 Model Validation and Reasonableness Checking Manual), a map showing the geographical distribution of links meeting the criterion vs those "failing low" (underestimation) vs those "failing high" (overestimation) would be very helpful to see if a specific area systematically underestimates/overestimates or the failing links are quite sporadic. This will help us in the future to determine if additional validation is warranted in project-level studies in some areas of the County.
**VDOT NRO Traffic Operations comments:**

- Mobility Chapter, Appendix C under Operational Management, We suggest to add the following operational improvement in the operational management strategies.

  "Install permanent or portable CCTV at common congestion points on major corridors to monitor traffic conditions."

**VDOT – Traffic Engineering comments:**

- All outstanding comments have been addressed and TE offers no new comments at this point.

**VDOT – Preliminary Engineering and Land Use comments:**

- The County should coordinate typical road sections/standards and proposed pedestrian facilities that fall at the boundary with another jurisdiction with that other jurisdiction. For instance, the City of Manassas has its own road category and typical section for Dumfries Road and existing/planned pedestrian/bike facilities.

**VDOT – Land Development Comments:**

- Mobility Chapter General Roadway Standards, refer to the VDOT minimum spacing standards, Table 2-3 of the VDOT Road Design Manual Appendix F and Tables B(2)-2 and B(2)-3 of the VDOT RDM Appendix B(2).
  - For Parkways and Principal Arterials the minimum crossover spacing with a design speed of 60 is 1320’. The 1100 feet spacing only works for design speeds 35 to 45 mph and the 900 feet for design speeds up to 30 mph.
  - For Minor Arterials the minimum crossover spacing with design speed of 50 mph is 1050’. The 900 feet spacing only works for design speeds 35 to 45 mph and the 700 feet for design speeds up to 30 mph.
  - For the Through Boulevard, Boulevard, and Avenue the min. spacing requirements should be based on the Multimodal Activity Centers.

**Virginia Department of Rail and Public Transportation (DRPT) comments:**

- Multimodal Solutions: Refer to DRPT’s Multimodal System Design Guidelines for best practices for identifying centers of activity, designating connected networks for all travel modes, and designing and retrofitting multimodal corridors.
- Mobility Policy 2: [https://www.census.gov/topics/employment/commuting/guidance/commuting](https://www.census.gov/topics/employment/commuting/guidance/commuting) is a dead link
- DRPT supports Mobility-Policy 5 and all action strategies. Consider changing TR5.5 to reflect a ¼ mile or 1/3 walking distance to the nearest transit facility, in response to new information regarding distance people are willing to walk in order to take public transit or other modes.
• What is the difference between Transit Center and Transit District (on the map), Figures 5 and 6 in the Mobility Chapter?

• Mobility Chapter, page 77 Appendix A, per Appendix B2 of the VDOT’s Roadway Design Manual (https://www.virginiadot.org/business/resources/LocDes/RDM/AppendB2.pdf), both DRPT and VDOT share joint review purview over Multimodal System Plans. I would recommend removing the line about a county waiting 5 years for approval.

• Overall DRPT supports comprehensive plan transportation policies and action strategies

Northern Virginia Transportation Authority (NVTA) comments:

• We reviewed the document and found the policies and action strategies support and not in conflict with NVTA’s long range transportation plan, TransAction. In fact, most of them are supporting and furthering NVTA’s goals and objectives. Therefore, we are in supportive of the plan.